ENVIRONMENTAL CHEMISTS

Date of Report: January 16, 1997 Date Received: January 9, 1997

Project: Metro Self Monitor, PO #M55671 Date Samples Extracted: January 10, 1997 Date Extracts Analyzed: January 13, 1997

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, AND ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	<u>Nickel</u>	<u>Zinc</u>
M55671	0.33	0.25	0.37	<0.05
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: January 16, 1997 Date Received: January 9, 1997

Project: Metro Self Monitor, PO #M55671

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 74779 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.33	0.31	6	0-20
Copper	mg/L (ppm)	0.25	0.25	0	0-20
Nickel	mg/L (ppm)	0.37	0.34	8	0-20
Zinc	mg/L (ppm)		<0.05	nm	0-20

Laboratory Code: 74779 (Matrix Spike)

	Reporting	Spike	Sample	% F	Recovery	Acceptance	Relative Percent
Analyte:	Units	Level	Result	MS	MSD	Criteria	<u>Difference</u>
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Chromium	mg/L (ppm)	5	0.33	102	101	80-120	1
Copper	mg/L (ppm)	5	0.25	102	100	80-120	2
Nickel	mg/L (ppm)	10	0.37	100	98	80-120	2
Zinc	mg/L (ppm)	5	< 0.05	102	99	80-120	3

Laboratory Code: Spike Blank

	Reporting	Spike	% F	Recovery	Acceptance	Relative Percent	
Analyte:	Units	Level	MS	MSD	Criteria	Difference	
Chromium	mg/L (ppm)	5	107	102	80-120	5	
Copper	mg/L (ppm)	5	106	99	80-120	7	
Nickel	mg/L (ppm)	10	106	101	80-120	5	
Zinc	mg/L (ppm)	5	106	103	80-120	3	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119 (206) 285-8282

SAMPLE CHAIN OF CUSTODY

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Beth M. Albertson, M.S. Bradley T. Benson Kelley D. Wilt 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

January 16, 1997

INVOICE # 97ACU0116-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M55671: Results of testing requested by Gerry Thompson, Project Manager for material submitted on January 9, 1997.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due \$ 65.00

FEDERAL TAX ID #(b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Beth M. Albertson, M.S. Bradley T. Benson Kelley D. Wilt 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

January 16, 1997

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on January 9, 1997 from your Metro Self Monitor, PO #M55671 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson

Chemist

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Enclosures ACU0116R.DOC